

ORGANIZATIONAL WORK INSTRUCTION

Coordination and Execution of Education Projects

HS30 MSFC Academic Affairs Office

Revision L

APPROVING AUTHORITY

NAME

TITLE

ORG

DATE

Tammy B. Rowan

Manager

HS30

July 15, 2008

**CHECK THE MASTER LIST-
VERIFY THAT THIS IS THE CORRECT VERSION BEFORE USE**

| Organizational Issuance HS30 | | |
|---|---------------------|--------------|
| Title: Education Outreach Organizational Work Instruction | [HS30-OWI-002] | REVISION: L |
| | Date: July 15, 2008 | Page 2 of 16 |

DOCUMENT HISTORY LOG

| Status (Baseline/ Revision/ Canceled) | Document Revision | Effective Date | Description |
|--|----------------------|-------------------|--|
| BASELINE | N/A | 8-20-99 | BASELINE DOCUMENT |
| REVISION | A | 1-21-00 | This revision cancels and supersedes the following OWI: CD60-OWI-002, Coordination and Execution of Pre-College and Post-Secondary Education Outreach Programs, CD60 MSFC Education Programs Department |
| REVISION | B | 2-24-00 | This revision cancels and supersedes the following OWI: CD60-OWI-002, Revision A, Coordination and Execution of Pre-College and Post-Secondary Education Outreach Programs, CD60, MSFC Education Programs Department |
| REVISION | C | 10-10-00 | This revision cancels and supersedes the following OWI: CD60-OWI-002, Revision B, Coordination and Execution of Pre-College and Post-Secondary Education Outreach Programs |
| REVISION | D | 3-6-02 | This revision cancels and supersedes the following OWI: CD60-OWI-002, Revision C, Coordination and Execution of Pre-College and Post-Secondary Education Outreach Programs, CD60, MSFC Education Programs Department |
| REVISION | E | 8-29-02 | This revision cancels and supersedes the following OWI: CD60-OWI-002, Revision D, Coordination and Execution of Pre-College and Post-Secondary Education Outreach Programs, CD60, MSFC Education Programs Department |
| REVISION | F | 6-12-03 | This revision cancels and supersedes the following OWI: CD60-OWI-002, Revision E, Coordination and Execution of Pre-College and Post-Secondary Education Outreach Programs, CD60, MSFC Education Programs Department |
| REVISION | G | 09-29-04 | This revision cancels and supersedes the following OWI: CD60-OWI-002, Revision F, Coordination and Execution of Pre-College and Post-Secondary Education Outreach Programs, CD60, MSFC Education Programs Department |
| REVISION | H | 03-18-05 | This revision cancels and supersedes the following OWI: CD60-OWI-002, Revision G, Coordination and Execution of Pre-College and Post-Secondary Education Outreach Programs, CD60, MSFC Education Programs Department. The new organizational code is HS30. The new title is OWI: HS30-OWI-002, Coordination and Execution of Elementary and Secondary and Post-Secondary Education Outreach Programs. The revised office name is MSFC Academic Affairs Office. |
| REVISION | I | 04-06-2006 | This revision cancels and supersedes the following OWI: HS30-OWI-002, Revision H, Coordination and Execution of Elementary and Secondary and Post-Secondary Education Outreach Programs. Revised to reflect the new HS30 manager and to reflect changes to program names in Appendix A, Appendix B, and Appendix C.. |
| REVISION | J | 09-25-2006 | Revised to correct acronyms, Applicable Documents, the reference document in section 3.1, the corrective and preventive action in 5.6, training information in 5.9.3, and programs in Appendix A, Appendix B, and Appendix D. |
| REVISION | K | 05-09-2007 | Revised to reflect new document name, reference new manager, to include new projects, and to correct references to updated applicable documents. |
| REVISION | L | 07-15-2008 | Revised to reflect new Academic Affairs Manager, updated Appendices B, C and D, and minor edits to correct applicable document titles. |

| Organizational Issuance HS30 | | |
|---|---------------------|--------------|
| Title: Education Outreach Organizational Work Instruction | [HS30-OWI-002] | REVISION: L |
| | Date: July 15, 2008 | Page 3 of 16 |

1. PURPOSE: The purpose of this instruction is to document the process by which the Academic Affairs Office (AAO) conducts business. This instruction establishes the procedures and responsibilities performed by the AAO that relate to the coordination and execution of **education projects and development of products** involving Marshall Center personnel and/or facilities and resources. This instruction forms a part of the MSFC Quality Management System (QMS) as defined by the Marshall Quality Management System Manual, MPD 1280.1.

2. APPLICABILITY: The procedure applies to those in-scope activities under the management of the AAO, which fall into four broad categories:

1. Elementary and Secondary Education (Appendix A)
2. Higher Education including Minority University Research & Education (Appendix B)
3. Education Technology and Products (Appendix C)
4. Informal Education (Appendix D)

3. APPLICABLE DOCUMENTS: Use current Revisions unless there is overriding authority.

| | |
|------------|--|
| MPD 1280.1 | Marshall Quality Management System Manual |
| MWI 5113.1 | Governmentwide Commercial Purchase Card Operating Procedures |
| MPR 1280.6 | Management Systems Internal Audits |
| MPR 3410.1 | Training |
| MPR 7120.1 | Program/Project Planning |
| NPR 1441.1 | NASA Records Retention Schedules (w/Change 4, 1/31/08) |

3.1 Reference Documents

NP-2007-01-456-HQ: NASA Education Strategic Coordination Framework: A Portfolio Approach

4. DEFINITIONS:

AAO – Academic Affairs Office

AAO Master List: The ISO 9000 Master Document List at the organizational level lists the AAO's OWIs; relevant letters, emails and forms; and applicable documents listed in Section 2 of this OWI. AAO processes and procedures defined in this OWI shall be compliant with the items on the Master List.

| Organizational Issuance HS30 | | |
|---|---------------------|--------------|
| Title: Education Outreach Organizational Work Instruction | [HS30-OWI-002] | REVISION: L |
| | Date: July 15, 2008 | Page 4 of 16 |

ISO: International Organization for Standardization.

MSFC: The NASA Marshall Space Flight Center.

NEEIS: The NASA Education Evaluation Information System.

N/A: Not Applicable.

OHC: Office of Human Capital -- the umbrella organization at MSFC in which AAO is located.

OWI: Organizational Work Instruction.

QS: Quality System.

QR: Quality Record: These are documents maintained to demonstrate conformance to specified requirements and effective operation.

QRN: Quality Record Number.

SATERN: The online System for Administration, Training, and Educational Resources for NASA.

Team: Four teams of individuals within the Academic Affairs Office are responsible for the following general areas of activity: Elementary and Secondary Education, Higher Education, Education Technology and Products, and Informal Education.

Team Lead: The team member appointed by the Academic Affairs Office Manager to coordinate team activities and to provide leadership to team members.

5. INSTRUCTIONS

Paragraphs 5.1 - 5.9 below address this OWI's response to each of the applicable ISO elements. All AAO activities covered by this OWI follow the processes shown in Appendices A-E.

5.1 Management Responsibility. The AAO Manager shall ensure adequacy and implementation of this OWI, and shall, as a minimum, conduct semi-annual management reviews to ensure the continuing suitability and effectiveness of the AAO quality system in satisfying applicable elements of the MSFC Quality Management System and objectives specified in MSFC **Quality Management System Manual**. Data provided for these reviews may include the following:

| Organizational Issuance HS30 | | |
|---|---------------------|--------------|
| Title: Education Outreach Organizational Work Instruction | [HS30-OWI-002] | REVISION: L |
| | Date: July 15, 2008 | Page 5 of 16 |

1. Changes in the AAO process/procedure
2. Results of internal audits and external audits
3. Customer feedback relative to quality system effectiveness
4. Effectiveness of the corrective and preventive action system (NEEIS)
5. Actions from previous management reviews
6. Any quality system issues
7. Potential updates to the quality system

5.2 Quality System. The AAO maintains the organizational structure, procedures, processes, and resources needed to implement quality management, as required by MPR 7120.1 (Program/Project Planning).

5.3 Contract Review - The AAO follows procedures established in MPR 7120.1 (Program/Project Planning).

5.4 Document and Data Control – Document control and revision is accomplished via HS30-OWI-001. That instruction defines the process for revising OWI-001, OWI-002 and OWI-003. In addition, the institutional-type records custodian shall maintain a master list of these OWIs and applicable documentation.

5.5 Purchasing – The AAO follows procedures established in MWI 5113.1 (Governmentwide Commercial Purchase Card Operating Procedures).

5.6 Corrective and Preventive Action - The AAO teams utilize the NEEIS to identify and implement corrective and preventive actions. NEEIS can be accessed at:
<https://neeis.gsfc.nasa.gov>.

5.7 Control of Quality Records. NEEIS is the repository of all quality records related to AAO projects. These quality records shall be retained in accordance with NPR 1441.1 (NASA Records Retention Schedules) under Agency Filing System # 1392, Educational Programs.

5.8 Internal Quality Audits - Internal audits shall be conducted in accordance with the procedure given in MPR 1280.6 (Management Systems Internal Audits).

5.9 Training - Procedures established in MPR 3410.1 (Training) as expanded below shall be followed by the AAO.

5.9.1 An employee shall be considered qualified to fill his/her initial position when the individual is hired and successfully completes the one-year probationary period. Further, an employee's qualifications to fulfill increased responsibilities within the same organization shall be determined by the individual's supervisor based upon the employee's experience and acceptable performance and the supervisor's judgment of the employee's capabilities.

| Organizational Issuance HS30 | | |
|---|---------------------|--------------|
| Title: Education Outreach Organizational Work Instruction | [HS30-OWI-002] | REVISION: L |
| | Date: July 15, 2008 | Page 6 of 16 |

5.9.2 Any necessary personnel training required to perform the AAO functions and conform to the requirements of the MSFC Quality Management System shall be provided by the employee's supervisor in accordance with the position description. This training includes the ISO overview training provided by the HS40/Training & Incentives Office and is required of every MSFC employee.

5.9.3 Upon employee completion of required training, a record of successful completion is maintained in the Marshall Center's SATERN online database. Individual AAO personnel can retrieve their training record via the SATERN system: <https://satern.nasa.gov>.

6. NOTES: N/A

7. SAFETY PRECAUTIONS AND WARNING NOTES: N/A

8. APPENDICES, DATA, REPORTS, AND FORMS: There are four major core education program types: detailed lists are included in Appendices A through D.

Appendix A: Elementary and Secondary Education

Appendix B: Higher Education

Appendix C: Education Technology and Products

Appendix D: Informal Education

9. RECORDS; N/A

10. TOOLS, EQUIPMENT, AND MATERIALS: N/A

11. PERSONNEL TRAINING AND CERTIFICATION: See section 5.9

12. FLOW DIAGRAM: See Appendix E

| Organizational Issuance HS30 | | |
|---|---------------------|--------------|
| Title: Education Outreach Organizational Work Instruction | [HS30-OWI-002] | REVISION: L |
| | Date: July 15, 2008 | Page 7 of 16 |

Appendix A Elementary and Secondary Education

The Elementary and Secondary Education Team manages and/or supports a number of education projects that serve educators and students from pre-kindergarten through twelfth grade. These projects include, but are not limited to, the following:

1. NASA Explorer Schools (NES)
2. NASA Digital Learning Network (DLN)
3. Aerospace Education Services Project (AESP)
4. Science and Engineering Fairs
5. Career Days
6. Educator Astronaut Project
7. Alabama Space Week

| Organizational Issuance HS30 | | |
|---|---------------------|--------------|
| Title: Education Outreach Organizational Work Instruction | [HS30-OWI-002] | REVISION: L |
| | Date: July 15, 2008 | Page 8 of 16 |

Appendix B

Higher Education

The Higher Education Team manages and/or supports a number of education projects that serve researchers, educators, and students from colleges and universities throughout the country with emphasis on serving minority institutions. These projects include, but are not limited to, the following:

1. Graduate Student Researchers Project (GSRP)
2. Intergovernmental Personnel Act (IPA)
3. Visiting Researcher Exchange & Outreach (VREO)
4. Student Volunteer Services
5. Cooperative (Co-op) Education
6. Corporate & College Recruiting
7. NASA Faculty Fellows
8. Undergraduate Student Research Project (USRP)
9. Marshall Space Grant Research Interns
10. Minority University Research and Education
11. The Annual Great Moonbuggy Race

| Organizational Issuance HS30 | | |
|---|---------------------|--------------|
| Title: Education Outreach Organizational Work Instruction | [HS30-OWI-002] | REVISION: L |
| | Date: July 15, 2008 | Page 9 of 16 |

Appendix C

Education Technology and Products

The Technology and Products Team manages and/or supports a number of education projects that serve educators, students, and life-long learners at all levels. These projects include, but are not limited to, the following:

1. NASA Education Technology Services (NETS)
 - NASA Portal Education Sections
 - NASA Education Home Page
 - Central Operations of Resources for Educators (CORE) Portal Web Site
 - NASA Explorer Schools Web Site
2. e-Education Small Projects
 - Central Operations of Resources for Educators (CORE)
 - Educator Resource Center Network (ERCN)
 - MSFC Educator Resource Center Network (ERCN)
3. MSFC Academic Affairs Office Web Site

| Organizational Issuance HS30 | | |
|---|---------------------|---------------|
| Title: Education Outreach Organizational Work Instruction | [HS30-OWI-002] | REVISION: L |
| | Date: July 15, 2008 | Page 10 of 16 |

Appendix D

Informal Education

The Informal Education Team supports a number of alliances with external partners that serve educators, students, and life long learners at all levels. These projects include, but are not limited to, the following:

1. NASA Explorer Institutes
2. Workforce Coalition: Education Task Force
3. NASA Engineering Design Challenges
4. Student Launch Projects
5. Team America Rocketry Challenge
6. Community-based Youth Organizations (4-H, scouting, boys and girls clubs, after-school groups, and others.)

| Organizational Issuance HS30 | | |
|---|---------------------|---------------|
| Title: Education Outreach Organizational Work Instruction | [HS30-OWI-002] | REVISION: L |
| | Date: July 15, 2008 | Page 11 of 16 |

Appendix E

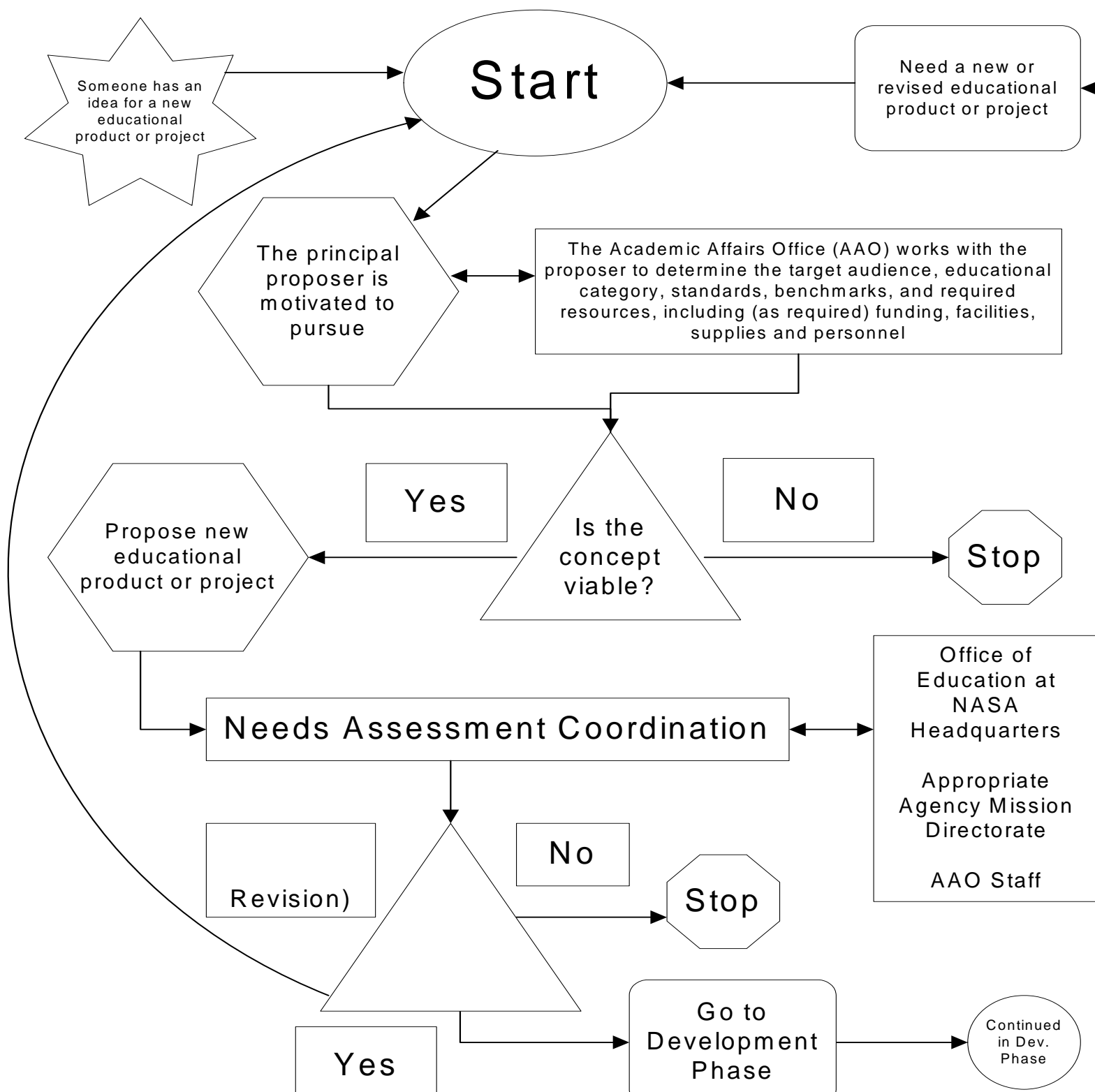
The following 4-four page flow chart describes the general process for producing and managing all AAO products and projects.

Like the process itself, the flow chart is divided into four distinct phases:

1. Initiation Phase
2. Development Phase
3. Production Phase
4. Implementation Phase

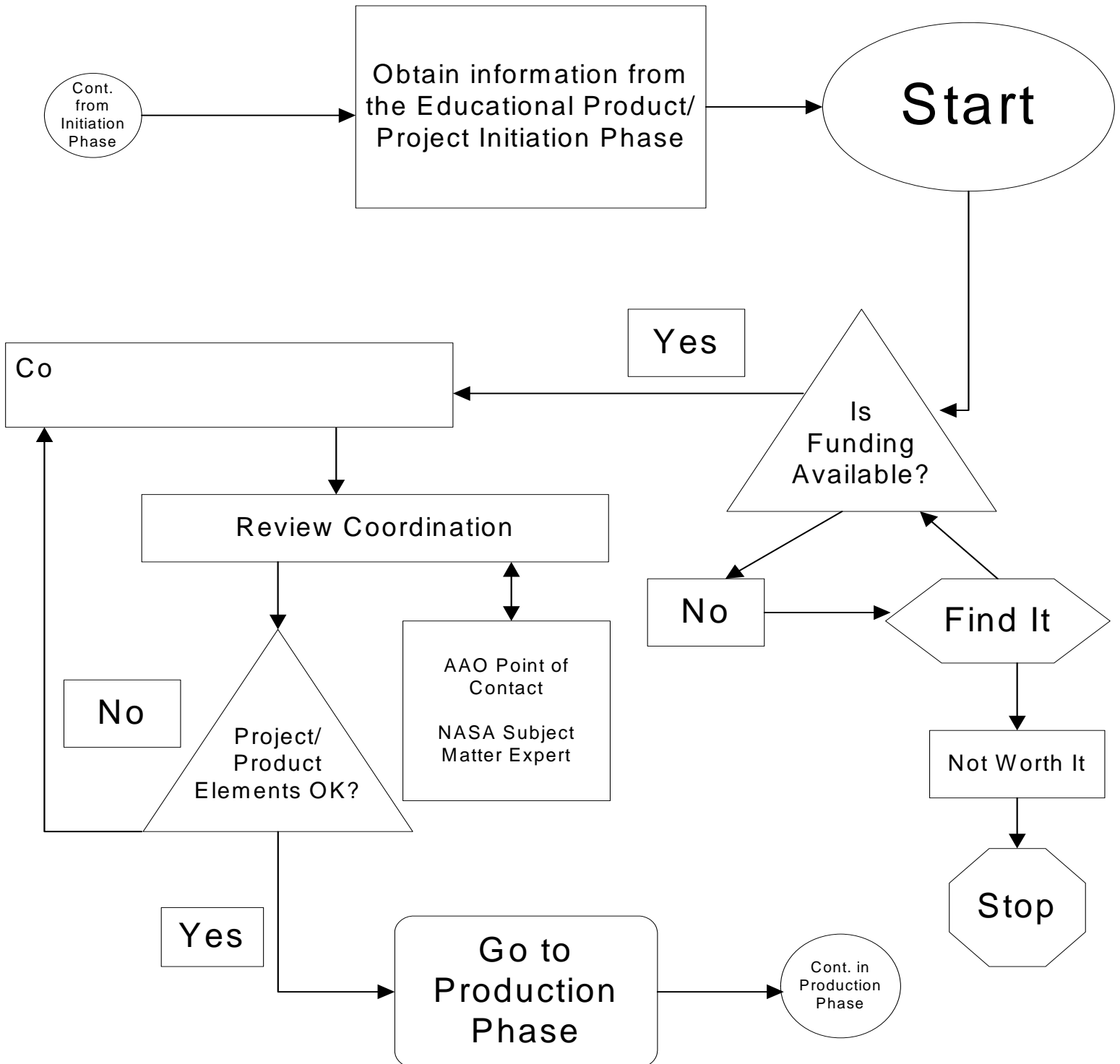
| | | |
|--|----------------|-------------|
| Organizational Issuance HS30 | | |
| Title: Education Outreach Organizational Work Instru | [HS30-OWI-002] | REVISION: L |

Educational Product/Project Initiation Phase

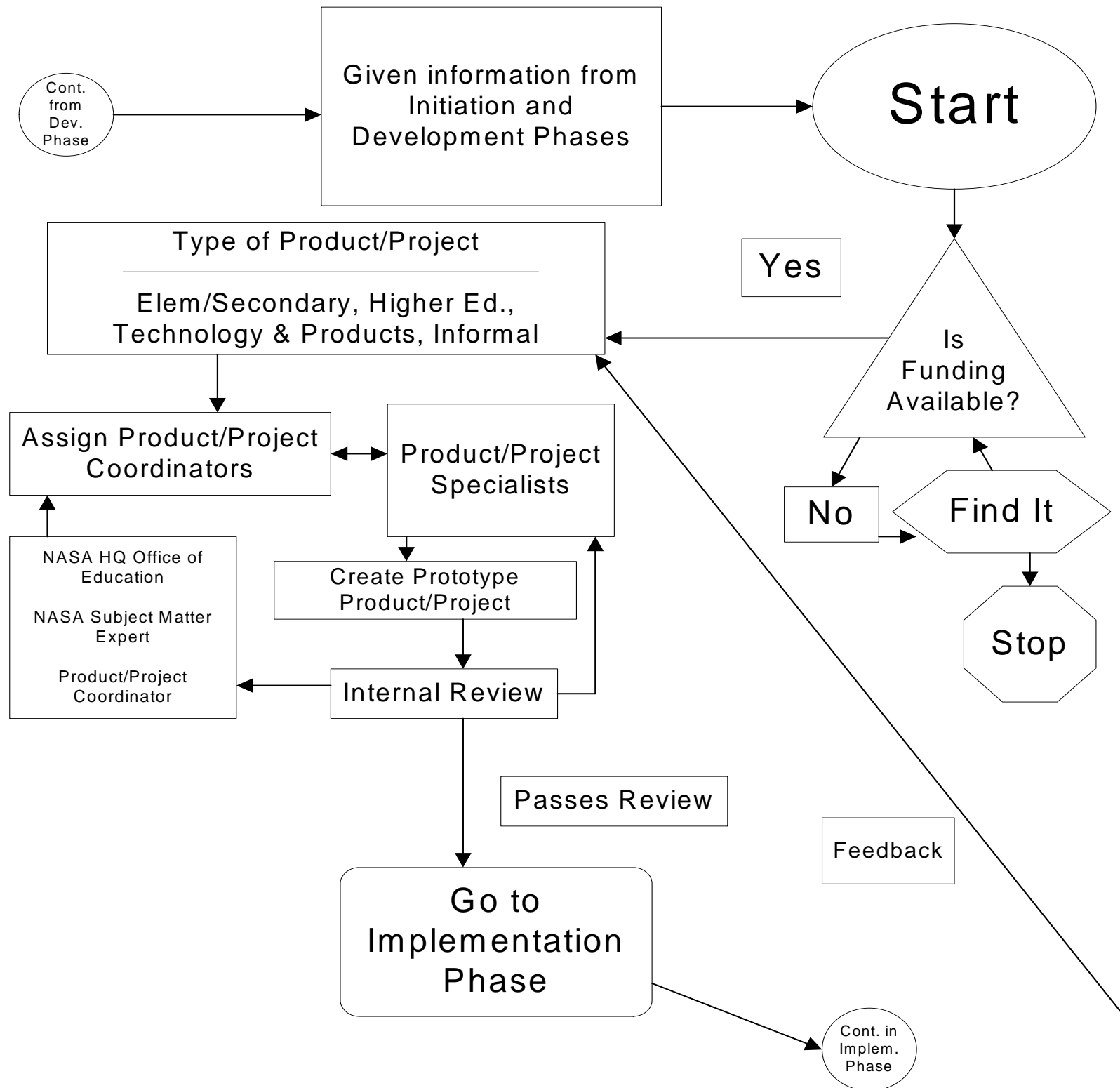


| Organizational Issuance | | |
|---------------------------|----------------|-------------|
| HS30 | | |
| Title: Education Outreach | [HS30-OWI-002] | REVISION: L |

Educational Product/Project



Educational Product/Project Production Phase



| Organizational Issuance HS30 | | |
|---|---------------------|---------------|
| Title: Education Outreach Organizational Work Instruction | [HS30-OWI-002] | REVISION: L |
| | Date: July 15, 2008 | Page 15 of 16 |

Educational Product/Project Implementation Phase

